TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

WYOMING

SOIL CONSERVATION SERVICE

Biology No. 202

January 1986

Subject: BLACK-CAPPED CHICKADEE*

General

The Baird's sparrow ($\underline{\text{Haliaeetus}}$ $\underline{\text{leucocephalus}}$) is a common resident in Colorado at elevations up to 9,000 ft (2,743 m) and in the mountains of Wyoming and northern Mexico.

Food Requirements

Sixty-eight percent of food eaten by the black-capped chickadee consists of animal matter, including insects, insect eggs, caterpillars, moths, plant lice, weevils, and spiders. Vegetable matter eaten includes small seeds, buds, bud scales, and in summer, the pulp of wild fruits such as bayberry and poison ivy.

In western Washington, this species occupies many different vegetative associations and modifies its foraging pattern according to tree type, exploiting both conifers and broad-leaved trees effectively.

Water Requirements

No information concerning water requirements was found in the literature.



Prepared by: Richard Rintamaki, State Biologist

State Resource Conservationist

^{*}Information taken from <u>Ecoregion M3113 Handbook</u> and <u>Habitat</u>
<u>Suitability Index Models</u>, <u>Wildlife Species Narratives</u> (literature searches), U.S. Fish and Wildlife Service, various dates between 1978-1984.

Cover Requirements

One researcher believes preferred habitat for this species is open, deciduous, or mixed forests. One study found that the Rocky Mountain race ($\underline{P. a. gerrinus}$) occurred in lower canyon floors and lower valleys in cottonwood-willow associations along streams. Another study stated that preferred habitats of the black-capped chickadee in the Canadian and Transition Zones from Alaska to New Mexico are open, sunny, deciduous woodlands, such as poplar, aspen, willow, and cottonwood groves, and that it avoids dense coniferous forests.

Reproductive Requirements

One study found this species in ponderosa pine and aspen associations of Colorado where nests were built in natural tree cavities, fenceposts, deserted woodpecker holes, or excavations of their own making in rotted wood. In New York, a study reported that birch, aspen, willow, ash, dead shrubs, and pin cherry were suitable for nesting as the chickadee easily excavated its nest cavity in these comparatively soft woods. One researcher studied black-capped chickadees in an area of discontinuous deciduous woodland with heavy undergrowth on a canyon floor near Logan, Utah. Here the average elevation of 12 cavities excavated by chickadees ranged from 1.6 ft (0.5 m) to 16.4 ft (5.0 m) above the ground with an average height of 6.2 ft (1.9 m).

One study reported that the minimum dbh of a nest tree (either snag or soft wood) in the Blue Mountains of Washington and Oregon was 4 in. $(102\,\mathrm{cm})$.

Special Habitat Requirements

No information concerning special habitat requirements was found in the literature.

Interspersion Requirements

The establishment of breeding territories in Utah is a gradual process. During the prenesting and nest-building stages, the average territory sizes were 5.4 acres (2.2 ha) and 5.7 acres (2.3 ha) respectively. While feeding their nestlings (the most critical stage of the nesting process), the birds used only 22 percent of the area established during the nest-building stage, an area of 1.25 acres (0.5 ha).

One study reported territory sites of 8 to 17 acres (3.2 to 6.9 ha) per breeding pair in New York. He also found that winter flocks may cover areas of 20 to 25 acres (8.1 to 10.1 ha).

Special Considerations

Black-capped chickadees descend to lower elevations during the winter in Wyoming and Colorado.